Claims:

1. An infrared (IR) receiving device with IR detector elements (3) for receiving IR signals from a communication zone (5), as well as with a processing circuit for deriving electric signals corresponding to the IR signals received, characterized in that the IR detector elements (3) are provided in at least one matrix-type arrangement (2) which corresponds to a matrix-type segmentation of the communication zone (5), and that the processing circuit comprises a maximum detector circuit (9) connected to the IR detector elements (3), which maximum detector circuit (9) selects one respective maximum output signal from among the output signals of the IR detector elements (3) for deriving the electric signal.

2. A receiving device according to claim 1, characterized in that at least two matrix-type IR detector element arrangements (2a, 2b) are provided, the positions of the IR detector elements (3) being offset relative to each other from array to array.

3. A receiving device according to claim 1, characterized in that the IR detector elements (3) are provided in a chessboard-type arrangement, with their active detector surfaces being substantially consecutively arranged, without gaps.

4. A receiving device according to any one of claims 1 to 3, characterized in that a common imaging lens (4) is arranged in front of the or each IR detector element arrangement (2).

5. A receiving device according to any one of claims 1 to 4, characterized in that a threshold-value-forming unit (11) is connected to the IR detector elements (3) whose output is connected to the input (22) of a comparator (12) at whose other input (21) the respective maximum IR detector element output signal is applied.

6. A receiving device according to claim 5, characterized in that each IR detector element (3.i) for selecting the maximum output signal has at least one consecutive diode (14.ia, 14.ib), the diodes, optionally in groups, being interconnected by their sides fa-

cing away from the IR detector elements (3.i), e.g. by their cathodes.

7. A receiving device according to claim 6, characterized in that the diodes, or the diodes (14.ib) of one group, respectively, are connected to a common resistor (20) from which the respective maximum IR detector element output signal can be taken and supplied to the other input (21) of the comparator (12).

8. A receiving device according to claim 6 or 7, characterized in that the diodes, or the diodes (14.ia) of another group, respectively, are connected to the threshold-value-forming unit (11).

9. A receiving device according to any one of claims 5 to 8, characterized in that the threshold-value-forming unit (11) is formed by an RC unit (16).

10. A receiving device according to any one of claims 5 to 9, characterized in that the threshold-value-forming unit (11) has a voltage divider (18, 19) from which the threshold voltage is supplied to the one input (22)

of the comparator (12).